## Learning Objectives

By the end of this session, participants will be able to:

- Develop skills on teaching a learner how to perform a procedure
- Practice teaching procedures
- Identify the three phases of teaching procedures

# Agenda:

## Welcome and introduction to teaching procedures slides:

#### **TEACHING PROCEDURES**

3 phases of psychomotor skills development:



<sup>1</sup>Dunnington GL, DaRosa D. Instructor's Guide for Teaching Residents to Teach. Springfield, IL: Association for Surgical Education (2000).

#### **COGNITIVE PHASE**

Learners first need to understand the "why" components of the procedure:

- Why learn procedure?
- o Indications
- o Contraindications
- o Risks/complications
- o Benefits
- o Alternatives

Since adult learners prefer active learning, teach through questioning:

- Has the learner done this procedure before?
- What does s/he recall about indications, risks, etc.?

Then address the "how" components of learning the procedure:

- Demonstrate the procedure step by step.
- Ask learner to verbalize the steps.

• Ask for questions.

#### **DEVELOPMENTAL PHASE**

- Next, learners need to practice.
- Have learner demonstrate procedure for you, explaining each step.
- Provide guidance for each step, both verbally and physically.
- Evaluate learner's proficiency: what did learner do right, wrong?
- Ask learner to self-evaluate, then give specific feedback, starting with the positive aspects of the performance.
- Does the learner have any questions, now that s/he has practiced the skills?

### AUTOMATED PHASE

- Finally, learners begin achieving proficiency and are ready for independent performance.
- Observe performance again, this time with minimal interruption.
- You can now teach the fine points.
- Encourage self-directed learning:
  - What are the learner's future learning goals, and how does s/he want to achieve them?
  - What have you read or done that helped you learn procedures?
- Arrange for a follow-up session.

## **Practice teaching procedures with feedback**

- Residents divide into pairs.
- First resident teaches procedure.
- Resident observer fills out checklist, gives feedback using checklist.
- Second resident teaches procedure.
- Resident observer fills out checklist, gives feedback using checklist.

### Large-group summary of what was learned (5 minutes)